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**Understanding social comparison, self-esteem and body image concerns of  
Instagram users: The impact of perceived ephemerality and permanency of  
Instagram content**

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Instagram users: The impact of perceived ephemerality and permanency of  
Instagram content**

by

**Soomin Kim**

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# **Understanding social comparison, self-esteem and body image concerns of Instagram users: The impact of perceived ephemerality and permanency of Instagram content**

by

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Instagram, one of the fastest-growing social media networks, provides users with different features. Two primary Instagram features are Instagram posts and Instagram stories. Instagram post allows users to upload photos or videos and share them with their followers. The content stays on the users' social media feed unless the content is deleted. Instagram story has an ephemeral nature as the content uploaded vanishes after 24 hours. This study was designed to examine individual's psychological constructs when using different Instagram messages. Social comparison, self-esteem, and body image concerns based on user's perception of ephemerality and permanency were examined. Instagram usage habits were examined as well, for both story and post. An online survey was distributed through the University of Texas at Austin's advertising participant pool and linear regression was used through SPSS to find significant relationships. First, results demonstrated no significant relationship between the perceived permanency of Instagram posts, social comparison, self-esteem, and body image concerns as the content can be removed whenever the user desires. On the other hand, the perception of ephemerality on Instagram story negatively influenced social comparison and body image concerns while there was no significant relationship with self-esteem. Overall, the

result of the present study aligns with previous research, as Instagram users who socially compare are likely to have lower self-esteem and have higher body image concerns.

*Keywords:* Instagram, Social Comparison, Self-esteem, body image concerns, ephemeral social media, permanent social media

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## **Chapter 1**

Through the expansion of technology, different types of media are emerging every day. Instagram, Facebook, Twitter, and Tik Tok continue to be the most popular social media people use daily. In today's world, social media is available for everyone making it easy to create an account and post any content (Lee, Lee, & Moon, 2015). As the popularity and use of social media rise, it is necessary to understand social media's influence on people. The majority of the scholarly research focused on how social media, in general, forms social comparison, impacts self-esteem and how exposure to idealized images creates body image concerns (Longobardi, 2018; Jan, Soomro & Ahmad, 2017). However, there has not been a wide array of studies regarding how people perceive social media content in a particular media and how it influences people. This research will focus on the social media platform, Instagram, to uncover how users respond to different perceived Instagram messages.

The proposed study will examine how people understand and respond to different types of Instagram messages, comparing Instagram posts and Instagram stories. An Instagram post is a photo/video that an individual can upload to their account, which others can view the comments and the number of likes on each post. In this research study, Instagram post is viewed as permanent media, as it makes it easier for users to go back to see and check other's content as it will stay on the platform permanently unless the individual decides to delete or hide the post. Also, Instagram posts allow individuals to archive content that is perceived as valuable. Instagram stories are different as it is a feature within the Instagram app, allowing users to post images and video in a slideshow format and is only available for 24 hours. Instagram stories are assumed to be ephemeral as the content disappears in a short period and makes it harder for others to go back to past content. By examining whether users perceive these two Instagram messages to be ephemeral or permanent, the proposed study will reveal



what type of media influences user's social comparison, self-esteem, and body image concerns.

The current research also focuses on finding the relationship between Instagram user's motivations and patterns of using Instagram and its influence on social comparison, self-esteem, and body image concerns. The present research examines the different categories of content that users upload, usage of Instagram features, the reasoning for editing photos, and the time to create and upload content. By studying Instagram user's usage patterns, it is possible to have a better understanding of the psychological and behavioral traits of Instagram users.

## **Chapter 2: Literature Review**

### **Instagram and usage motivation**

Instagram is a photo and video sharing app available on iPhone and Android and is the first social media website that is born mobile (Miles, 2019). People can upload photos or videos for free and share them with their followers. Instagram is one of the fastest-growing social media networks. It allows users to share, manipulate, comment, and like on photos and videos of other users (Lee, Lee, & Moon, 2015). Instagram has attracted more than 150 million active users since it launched in October 2010 (Instagram, 2013). The growth of Instagram is significant, but it is not all positive growth. It became a pressure for users to capture and share the perfect photo on their Instagram feed (Wagner, 2017).

Instagram users have five primary social and psychological motives; social interacting, archiving, self-expression, escapism, and peeking (Lee, Lee, & Moon, 2015). Social Interaction is the primary motive as people use Instagram to interact with many people, maintain a relationship with others by networking, and keep in touch with friends and family. Instagram is also used for archiving, a motive of sharing personal and daily lives and sharing them in their personal social media space. Self-expression is also a primary motivation that encourages people to use Instagram. Instagram users can express their actual self in their personal space and also provide life updates. Also, escapism and peeking are other motivations. Instagram users escape from reality by connecting with people who have similar interests or browse celebrities' life. This social media helps people to forget about their problems while using Instagram. Peeking is also described as looking at what other Instagram users are doing and saying by viewing other's pages (Lee, Lee, & Moon, 2015).

### **Instagram post and permanent content**

Instagram post is a primary feature on Instagram that allows users to upload photos or videos and share them with their followers. Instagram offers its users to apply different

manipulation tools and filters to transform its image (Hu, Manikonda, Kambhampati, 2014). Users can show interest in a photo by liking or commenting on the other user's post. Also, users can use hashtags, #, in their photos to connect with people who share similar interests (Landsverk, 2014).

The Instagram post stays on an individual's profile permanently until the user decides to delete it. Photos and videos that are uploaded to Instagram, by default, can be viewed by anyone who uses the Instagram app. However, users can set their account as private to make the image or photo only visible to their Instagram friends (Hu, Manikonda, Kambhampati, 2014).

### **Instagram Story**

Instagram story launched in August 2016. Instagram stories are similar to regular Instagram posts, but the content vanishes after 24 hours. Instagram story attracts more than 500 million Instagram users to use Instagram stories daily (Read, 2020).

Instagram introduced the feature of stories to allow users to share everyday moments with their followers. The Instagram story allows users to capture moments with ease, play with video, interact with friends, and highlight daily activity onto the user's profile. It is an easy and quick way to share moments and experiences with their users by using text, stickers, GIFs, and music. It is also a way to interact with friends by adding interactive features like Question stickers and surveys which help users share and get feedback. Users are also able to use effects like Boomerang and Superzoom to make their daily moments more fun. Besides, users can pin their favorite moments of their story onto their profile. This feature allows users to share their content for more than 24 hours as it is highlighted on their profile (Instagram, 2020).

To view an Instagram story, users can tap the profile of the other user, and it will come up in chronological order. Unlike regular Instagram posts, users can not like or add a public comment to other users' stories (Read, 2020).

## **Ephemeral social media**

Nowadays, the social media platform is experiencing a shift in media from providing permanent content to ephemeral content. Ephemeral content is described as a “time-limited function of social media” and has been rising as the latest marketing and social media buzzword (Chen & Cheng, 2019). These ephemeral social media applications allow content to be shared for a set time limit and is deleted automatically (Wakefield & Bennett, 2017). Most ephemeral content occurs in a synchronous setting which gives users similar experience as face-to-face interaction. Furthermore, ephemerality plays as an effective tool that shows daily activities through selfies, photos, and short videos (Aljouhi, 2017).

One of the most well-known and most-used platforms for ephemeral content is Snapchat. Unlike other social media platforms, such as Facebook and Twitter, Snapchat has an ephemeral nature as its content automatically deletes after a short period (Verstraete, 2016). Snapchat is mainly known for providing ephemeral content that does not exceed 10 seconds (Xu, Chang, Welker, Bazarova, & Cosley, 2016). Snapchat allows its users to send pictures or short videos to people who they have added as friends. Snapchat requires users to search for friends creating a smaller network of friends compared to other social media. Snapchat users can have mundane conversations and reduce self-consciousness when uploading their content while encouraging users to have playful interaction. This unique feature of erasing messages in a short period attracts a lot of users to be free of self-expression (Choi & Sung, 2018).

Ephemerality appears to be a major driver of sharing intentions as the content available for a limited time. It allows users to share broad content categories from daily activities to sensitive information, such as selfies and nude photographs. Also, users expressed how ephemerality counteracts their privacy concerns as they can control their content viewers (Morlok, Constantious, & Hess, 2018). In contrast, there are some downsides to ephemeral

content. Users noted that automatic deletion of information is not beneficial when they want to store information, leading users to feel loss and regret (Morlok, Constantious, & Hess, 2018).

### **Social media and social comparison**

Social comparison theory is the idea that individuals determine their own worth when comparing themselves with others (Festinger, 1954). Social comparison can be divided into two different parts, upward and downward comparison. Upward comparison is comparing themselves with others whose abilities are better than their own (Nortje, 2020). Upward comparison effects on self-evaluations, self-esteem, and in hopes of enhancing their self-assessment (Collins, 1996). Downward comparisons are comparing with someone worse off than the individual (Nortje, 2020) and make the individual perceive to be better off than the comparison target (Wills, 1987). The favorable outcome of downward comparisons is that it produces an enhancement of the individual's psychological state (Wills, 1987). People use social media networks to communicate, build relationships, and share information, however, the majority of social media users lead themselves to make upward and downward comparisons to other users. Upward comparisons create a feeling to envy other lifestyles leading individuals to feel ungrateful for their own lives (Jan, Soomro & Ahmad, 2017).

As social media usage increases, diverse research focuses on studying the relationship between social media and social comparison (Tiggemann, Hayden, Brown, & Veldhuis, 2018; Lee, Lee, & Moon, 2015). Social networking content is peer-generated and individuals can decide how and when they wish to upload it. It also pressures users to share and capture their perfect photos on their feed (Wagner, 2017). Also, as most social networks are based on likes and comments, individuals are more likely to compare the number of likes to their peers (Tiggemann, Hayden, Brown, & Veldhuis, 2018). Individuals who have a higher investment in the number of likes are more likely to compare their appearance and have facial dissatisfaction (Tiggemann, Hayden, Brown, & Veldhuis, 2018).

Previous research that studied this topic, focuses on Facebook and Instagram, where content can be uploaded, shared, liked, and commented on (Lee, Lee, & Moon, 2015). There is a lack of research on ephemeral social media, Snapchat and Instagram stories, where interaction and communication are the primary motives (Aljouhi, 2017). One study stated that it was hard to find evidence for a relationship between social media with specific features like Snapchat and WhatsApp and social comparison (Schmuck, Karsay, Matthes, & Stevic, 2019). As Snapchat and WhatsApp focus on interacting and communication where people share more private conversations compared to other social networks, (Schmuck, Karsay, Matthes, & Stevic, 2019) the users of these social media did not show social comparison. As the Instagram story also shares a similar ephemeral nature, this research paper will examine whether the ephemerality of Instagram content is negatively associated with social comparison.

*Hypothesis 1:* Users who perceive Instagram story as more ephemeral will perform less social comparison while using Instagram.

*Hypothesis 2:* Users who perceive Instagram posts as more permanent will perform more social comparison while using Instagram.

### **Social media and self-esteem**

Self-esteem refers to a person's positive or negative evaluation of the self. It is a psychological construct to which an individual determines themselves to be worthwhile (Coopersmith, 1967). There are different ways to describe self-esteem; self-worth, self-regard, self-respect, and self-acceptance (Blascovich, 2014).

Due to the expansion of social media and concerns surrounding the use of social media, there is a lot of study done that proves social media usage has a direct influence on self-esteem (Jan, Soomro & Ahmad, 2017). One study showed that editing their post and carefully selecting the information on their social media profile leads to enhanced self-esteem, having higher self-esteem about themselves (Gonzales, Hancock, 2010). Also, individuals who receive positive

feedback from friends, such as comments or likes, are likely to affect self-esteem as positive feedback enhances self-esteem, while negative feedback led to decrease self-esteem (Valkenburg, Peter, & Schouten, 2006).

Previous studies showed contrary views on whether social media usage has a positive or negative influence on self-esteem (Jan, Soomro & Ahmad, 2017). While browsing other user's social media, people will start envying other's lifestyles who they view to be superior to them. Users begin to feel less privileged and inferior to others making upward comparisons. These negative feelings about themselves have a direct impact on self-esteem. It showed that increase in social media usage would influence self-esteem to decrease (Jan, Soomro & Ahmad, 2017). Also, high passive use of social media, such as Facebook, leads to higher social comparison, which is also negatively related to self-esteem (Ozimek & Bierhoff, 2020). Another study proved that social media users usually make an upward comparison while browsing, and lower state self-esteem and life satisfaction were associated (Midgley, Thai, Lockwood, Kovacehff, & Page-Gould, 2020). This shows that social media usage causes users to socially compare, which leads to affect self-esteem.

Most research examines the relationship between self-esteem and social media in general, including all types of social media. However, there is a lack of research on finding the difference in self-esteem while using different perceived social media messages. One study proved that the transience nature of Snapchat promotes greater extraversion compared to other social media networks, such as Facebook (Lee Taber University of California, 2018). By expressing more positive emotions online, the user's expressed fewer concerns for self-esteem for Snapchat. As Instagram stories have a similar ephemeral nature, this paper will examine whether Instagram story users will show less self-esteem compared to when they are using Instagram posts.

## **Idealized image on social media and body image concern**

Exposure to idealized images and how people consume media has been largely studied in terms of traditional media (Levine & Harrison, 2009; Brown & Tiggemann, 2016). Previous studies focused on traditional media, where people were exposed to idealized images of models and celebrities. The studies proved that exposure to thin-ideal images has a negative effect on body satisfaction (Brown & Tiggemann, 2016). However, due to the increase of social media usage and image-focused social media networks, people are now exposed to more of these idealized images not only from models and celebrities but from friends and followers.

People are not only exposed to these images, but users also try to create their best selves on their social media pages (Wagner, 2017). This behavior of self-presenting themselves into their idealized self can be found by social media users who post photos such as selfies and edit their photos to upload their best presentation of their appearance. The motivation for this behavior, self-presentation, can be divided into two. First is to please the audience and match oneself to others expectation, while the second is to match their ideal self (Mullen & Goethals, 1987). Social media self-presentation mostly occurs in social media profiles. Social media profile allows users to create their own identity providing personal information, links, pictures, and followers (Harring & Kapidzic, 2015). One study proved that individuals, both male and female, experiment with their online presence and post untruthful information to their profiles (Harring & Kapidzic, 2015). According to a Pew survey, social media users expressed the importance of looking good, both physically and reputationally, on their social media as some followers can lead to important connections in the future so it is essential to post content that people want to think about the individual (Madden & Lenhart, 2020).

As exposure of idealized images on social media networks increases, there is a lot of study about the relationship between social media and body image concerns (Brown & Tiggemann, 2016; Longobardi, 2018; Tiggemann & Anderberg, 2020; McLean, Paxton,



Wertheim, & Masters ,2015). As Instagram allows users to edit their photos to achieve their ideal look, it creates more opportunities for Instagram users to be exposed to idealized images on their social media pages (Brown & Tiggemann, 2016). When users are regularly exposed to the visual content of others on their social media, this gives more opportunities to compare their appearance, which leads to having negative effects on their body image (Longobardi, 2018).

Body image is a perception or judgment of an individual's own body (Slade, 1994). This perception is created by an individual, comparing their body with someone else and having positive or negative feelings about their appearance. Social media such as Instagram and Snapchat, which focus on visual content, leads adolescents and young adults to express more dissatisfaction with their body images and have more emotional symptoms (Longobardi, 2018). However, when users are shown paired 'Instagram vs. reality' posts where people upload photos of real images and Instagram -style idealized image posts, people expressed less body dissatisfaction. In other words, this showed that idealized images on Instagram do affect user's body dissatisfaction (Tiggemann & Anderberg, 2020).

Another interesting finding was that social media users who are active users showed significant body dissatisfaction and overvalued the importance of shape and weight. Also, users who invest more time and effort before uploading their photos showed higher body image and eating concerns (McLean, Paxton, Wertheim, & Masters, 2015).

Snapchat users, unlike other social media network users, tend to send photos of their daily activities to whom they have strong ties especially, their close friends, partners, and family (Piwek & Joinson, 2015). Snapchat users are more effortless when sending photos to their friends and not focusing on getting pictures of their best selves. As Instagram stories have a similar ephemeral nature, this paper will examine whether Instagram story users will have fewer body image concerns than Instagram post users (Jan, Soomro & Ahmad, 2017).

*Hypothesis 3:* Users who use Instagram story knowing its ephemeral nature, will have high self-esteem and less body image concerns.

*Hypothesis 4:* Users who use Instagram post knowing its permanent nature, will have low self-esteem and more body image concerns.

### **Social comparison, self-esteem and body image concern**

Social comparison and self-esteem are two primary topics regarding social media usage in general. Most research focuses on the relationship between social comparison and self-esteem. This paper also searched for evidence whether people who socially compare more have lower self-esteem. As peeking is one of the primary motivations for Instagram users (Lee, Lee, & Moon, 2015), people tend to use Instagram to vicariously experience other's lives and view other's content. Upwards social comparison is a common reaction amongst these people, and users start to envy the lifestyle of others and feel less privileged and inferior. These negative feelings that are formed while using Instagram will have a direct impact on self-esteem. Due to the increase of image-based social media, people focus on posting their best selves on their platforms. As Instagram offers different manipulation tools and filters, people focus on editing and transforming to create a more idealized image (Hu, Manikonda, Kambhampati, 2014). Viewing other images and socially comparing themselves would lead users to perform more body image concerns. The research will focus on whether social comparison will influence an individual's lower self-esteem and body image concerns.

*Hypothesis 5:* Instagram users who socially compare more are likely to have lower self-esteem and more body image concerns.

### **Instagram usage patterns**

When studying Instagram user's, usage motivation is widely studied. For Instagram, social interacting, archiving, self-expression, escapism, and peeking (Lee, Lee, & Moon, 2015) are the five primary motivations. The primary motivations reveal why people use Instagram

and what they use Instagram for. These motivations show that Instagram users use the social media network to communicate, view past content, express their feelings, escape from reality, and look into other's content. However, there is a lack of study on how people use Instagram. The types of content people post, features they use, efforts they make to create their content are often mentioned in previous studies that could be related to individual's social comparison, self-esteem, and body image concerns. The category of images that people upload is associated with an individual's personality (Ferwerda & Tkalcic, 2018). Personality also was associated with editing photos, for example, narcissistic people are significantly likely to edit their photos (Kim & Chock, 2016). Studying these elements will reveal how the usage patterns will influence an individual's social comparison, self-esteem, and body image concerns. This present study asks the following questions:

*RQ1:* How are the different categories of content (food, selfie, friends, nature, etc.) that Instagram users usually post associated with their social comparison (RQ1a), self-esteem (RQ1b), and body image concerns (RQ1c)?

*RQ2:* How are the use of different Instagram features (text, video, emoji, doodles, etc.) associate with Instagram user's social comparison (RQ2a), self-esteem (RQ2b), and body image concerns (RQ2c)?

*RQ3:* How are the different reasons for editing photos (slim body, flawless skin, etc.) associate with Instagram user's social comparison (RQ3a), self-esteem (RQ3b), and body image concerns (RQ3c)?

*RQ4:* How are the amount of time to create and upload a post on Instagram associated with Instagram user's social comparison (RQ4a), self-esteem (RQ4b), and body image concerns (RQ4c)?

## **Chapter 3: Method**

### **Sample**

A total of 224 respondents who were part of the participant pool at the University of Texas participated in our survey. Out of 224 responses, 205 were valid. Among the participants, 165 were female (73.7%) and 39 were male (17.4%). The average age of participants is 18-24 as 200 participants identified themselves to be between 18 to 24 years old. About 62.5% were White, followed by Asian (12.1%), Other (11.2%), Black or African American (4.5%), American Indian (0.9%), and Pacific Islander (0.4%). The participants, on average, accessed their social media account once a day and spent 1.7 hours a day on Instagram.

### **Procedure**

To reach participants, an online survey was created through Qualtrics. Accordingly, participants anonymously filled out the online Qualtrics questionnaire through a link that was shared to The University of Texas at Austin's Advertising Participant Pool. Participants were then asked to consent to the research guidelines and complete the survey. The survey approximately takes 10 minutes to complete, which examined how individuals react to different perceived Instagram messages and social media usage habits. To ensure the quality of the research study, the first question in the survey asked whether they have ever used the social networking service, Instagram. If they select *No*, they were filtered out of the data set. In addition, the second question asks how often they access their Instagram account. If they access Instagram *less than once a week*, they were filtered out of the data set. If the participants are non-active Instagram users, the quality of the results is not guaranteed. The data collection process took place for approximately a month, from November 2020 to December 2020, in which a total of 224 people visited the survey. Of this total, after the two filter questions, 205 responses were qualified for the data analysis.

## Measurement

The survey included questions measuring participant's Instagram usage, attitudes, and self-analysis such as social comparison, self-esteem, and body image concerns. All the variables are measured with a 7-point Likert scale ranging from *Strongly Disagree* to *Strongly agree* unless indicated.

**Independent Variables** The survey measures whether participants indicate Instagram story to be ephemeral and Instagram post to be permanent. To measure if participants viewed Instagram posts to be permanent ( $M=5.8$ ,  $SD=0.97$ , Cronbach's  $\alpha=.756$ ), they were asked to rate three statements under a seven-point-Likert scale. The statements included "It is easier for others to go back and see/check my past posts", "Content I am posting in Instagram post will stay on the platform for a long time", and "It allows me to archive the posts that I perceive as valuable." In addition, to figure out whether participants viewed Instagram story to be ephemeral ( $M=5.26$ ,  $SD=1.18$ , Cronbach's  $\alpha=.688$ ), they were given two statements, which were "Content I am posting in the story disappears in a short period of time" and "It would be hard for others to go back to past content that I posted".

**Dependent Variables** The "Social Comparison" variable was measured by using the social comparison scale by Gibbons and Buunk (1999). This question, Q7, examines whether participants socially compare themselves with others in their daily lives or through social media. The question asks participants to rate six statements under a seven-point-Likert scale ranging from *Strongly Disagree* to *Strongly agree*. ( $M=4.37$ ,  $SD=1.079$ , Cronbach's  $\alpha=.737$ ) The statements included "I compare myself with others on Instagram to see if I am doing well socially", "I like to find out what others feel/think", and "If I want to find out how well I have done something, I compare what I have done with what how others are doing". For the "Self-esteem" variable, the Rosenberg self-esteem scale was employed. This variable was measured by rating seven different statements under the same 7-point Likert scale. ( $M=4.715$ ,  $SD=0.99$ ,

Cronbach's  $\alpha=.771$ ) The statements included "I am satisfied with myself", "I take a positive attitude toward myself", and "I am able to do things as well as most other people". To measure "Body image Concerns" participants were asked to answer two statements with a 7-point Likert scale. (M=5.03, SD=1.6, Cronbach's  $\alpha=.942$ ) The two statements asked, "I feel pressure from Instagram to look in better shape", and "I feel pressure from Instagram to look thinner".

**Control Variables** Participant's self-analysis can be affected by a lot of different factors. Participants' sex (165 females, 39 males) and ethnicity (140 White, 65 non-White) were controlled. Participant's usage frequency of Instagram story (M=3.83, SD=1.81) and Instagram post (M=2.78, SD=1.211) was measured separately. To examine whether participants viewed Instagram to be private, Instagram story and post's privacy perception was measured through the survey. The question asks participants to rate 4 statements under a seven-point-Likert scale and the same question was asked for Instagram story (M=3.97, SD=1.25, Cronbach's  $\alpha=.728$ ) and Instagram post (M=3.613, SD=1.23, Cronbach's  $\alpha=.734$ ) individually. The statements included "I feel free from privacy concerns", "I feel free from other's judgments", "I feel comfortable posting funny pictures of myself", and "I feel comfortable sharing sensitive information". As Instagram allows individuals to create a private account and only share content to close friends, this will affect how participants self-analyze their social media attitudes. Lastly, Instagram users who use Instagram in order to 'vicariously experience other's life' (M=4.31, SD=1.65) was controlled in this study. These users are more likely to focus on other's social media content and this would affect how individuals perceive themselves.

## **Chapter 4: Results**

To test the hypotheses, linear regression was employed through SPSS examining participant's social comparison, self-esteem, and body image concerns. Participant's gender, ethnicity, frequency of social media usage, privacy perception, and Instagram usage motivation were used as a control variable to test the hypotheses. Of all the different motivations of using Instagram, 'vicariously experience other's people lives' was the motivation variable that was used to analyze the results as 'peeking' was one of the primary motivations (Lee, Lee, & Moon, 2015) for using Instagram, and 'peeking' is most likely to influence people's psychological construct.

Also, as all users have different Instagram usage patterns, a regression analysis was conducted to examine whether the content, usage of Instagram features, the reasoning for editing photos, and the amount of time to create and upload influence psychological traits, such as social comparison, self-esteem, and body image concerns. Gender, ethnicity, and frequency of social media usage were used as control variables to examine the research question.

### **Perception of ephemerality and social comparison (Hypothesis 1)**

H1 predicted that users who perceive Instagram story as more ephemeral, will perform less social comparison. However, the results of the regression test (see Table 1.1) shows that users who perceive Instagram story as ephemeral are more likely to socially compare ( $b=0.187$ ,  $p<0.01$ ). In addition, privacy concerns are negatively correlated with social comparison, showing that those who are concerned about privacy are less likely to compare themselves with others ( $b=-0.220$ ,  $p<0.001$ ). Females are more likely to compare themselves with others ( $b=0.143$   $p<0.05$ ) and those who believe that they use Instagram to vicariously experience other's lives tend to compare themselves more with others ( $b=0.281$ ,  $p<0.001$ ). Thus, Hypothesis 1 was not supported and disconfirmed.

In another regression test, the result showed that Instagram users who take longer to post an Instagram story ( $b=.182$ ,  $p<0.05$ ) are more likely to socially compare (see Table.1.2).

**Table 1.1**

*Instagram story perception of ephemerality and social comparison*

<i>Coefficients<sup>a</sup></i>					
Model		Unstandardized	Coefficients	Standardized	Sig.
		B	Std. Error	Beta	
1	(Constant)	2.932	.426		6.877
	Perceived ephemerality of Instagram story	.170	.059	.187	2.868
	Privacy perception of story	-.190	.055	-.220	-3.427
	White	.107	.151	.046	.706
	Female	.396	.191	.143	2.075
	How often do you upload your Instagram story?	.031	.041	.051	.744
	To what extent do you agree for the following reason? To vicariously experience other's life	.184	.043	.281	4.237

<sup>a</sup>Dependent Variable: Social comparison2

**Table 1.2**

*Instagram story usage & social comparison*

<i>Coefficients<sup>a</sup></i>					
Model		Unstandardized	Coefficients	Standardized	Sig.
		B	Std. Error	Beta	
1	(Constant)	3.371	.249		13.517
	White	-.048	.160	-.021	-.298
	Female	.526	.207	.191	2.543
	How often do you upload your Instagram story?	.053	.043	.089	1.245
	How long does it take to create and upload an Instagram "story" (not post)	.160	.061	.182	2.607

<sup>a</sup>Dependent Variable: Social comparison



## Perception of permanency and social comparison (Hypothesis 2)

To test whether user's perception of Instagram post as permanent affect their social comparison, a regression test was conducted. There was no significant relationship between the two variables (see Table 2.1). Thus, Hypothesis 2 was not supported.

By examining whether the Instagram usage patterns influence individual's social comparison, another regression was employed. The results show that users who use filters ( $b=0.166$ ,  $p<0.05$ ) and add instant information, such as location or time, ( $b=0.151$ ,  $p<0.05$ ) when uploading Instagram posts are more likely to socially compare (see Table 2.2). Also, users who take longer to post and upload an Instagram post ( $b=0.32$ ,  $p<0.001$ ) are more likely to compare themselves to others (see Table 2.3).

**Table 2.1**

*Instagram post perception of permanency and social comparison*

<i>Coefficients<sup>a</sup></i>		Unstandardized	Coefficients	Standardized		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.525	.507		6.951	<.001
	Perceived permanency of Instagram post	.068	.073	.061	.937	.350
	Privacy perception of Post	-.219	.060	-.248	-3.612	<.001
	White	.091	.154	.039	.592	.555
	Female	.460	.188	.167	2.449	.015
	How often do you upload your Instagram post?	.031	.064	.034	.481	.631
	To what extent do you agree for the following reason? To vicariously experience other's life	.168	.044	.256	3.793	<.001

<sup>a</sup>Dependent Variable: Social comparison

**Table 2.2**

*Instagram post features usage & social comparison*  
*Coefficients<sup>a</sup>*

Model		Unstandardized	Coefficients	Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.585	.373		12.307	<.001
	White	.045	.160	.020	.285	.776
	Female	.644	.196	.233	3.282	.001
	How often do you upload your Instagram post?	-.012	.064	-.014	-.193	.847
	How likely do you use the following featuring when posting something through Instagram “post”? -Post Images/Photos	-.231	.054	-.294	-4.287	<.001
	How likely do you use the following featuring when posting something through Instagram “post”? -Instant Information (location, time, temperature)	.076	.036	.151	2.124	.035
	How likely do you use the following featuring when posting something through Instagram “post”? -Filters	.083	.037	.166	2.240	.026

<sup>a</sup>Dependent Variable: Social comparison

**Table 2.3**

*Instagram post usage & social comparison*

Model		Unstandardized	Coefficients	Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.096	.259		11.960	<.001
	White	.046	.158	.020	.290	.772
	Female	.491	.194	.178	2.533	.012
	How often do you upload your Instagram post?	.006	.061	.006	.091	.928
	How long does it take to create and upload an Instagram “post” (not story)	.229	.048	.320	4.741	<.001

<sup>a</sup>Dependent Variable: Social comparison

### Perception of ephemerality influence on self-esteem& body image concerns (Hypothesis 3)

To test whether the perception of ephemerality of Instagram story affects an individual's self-esteem and body image concerns, another regression analysis was conducted. However, the results (see Table 3.1) show that there was no significant relationship between perceived ephemerality of Instagram stories and self-esteem.

Users who perceived Instagram story to be ephemeral are more likely to have body image concerns ( $b=0.119$ ,  $p<0.01$ ) Also, females ( $b=0.24$ ,  $p<0.001$ ) and those who use Instagram to vicariously experience other's life ( $b=0.217$ ,  $p<0.001$ ) are more likely to have body image concerns (see Table 3.2).

By examining individuals' Instagram usage patterns by regression analysis, users who edit their Instagram stories to have a slim body ( $b=0.29$ ,  $p<0.001$ ) (see Table 3.3) and users who use filters ( $b=0.231$ ,  $p<0.05$ ) (see Table 3.4) are more likely to have body image concerns. For all results, female participants were more likely to have concerns about their body image. Therefore, Hypothesis 3 was not supported.

**Table 3.1**

*Instagram story perception of ephemerality and self-esteem*  
*Coefficients<sup>a</sup>*

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.925	.419		9.361	<.001
Perceived ephemerality of Instagram story	-.095	.058	-.114	-1.628	.105
Privacy perception of story	.238	.054	.302	4.382	<.001
White	.212	.149	.099	1.423	.156
Female	.154	.187	.061	.823	.411
How often do you upload your Instagram story?	.029	.040	.053	.714	.476
To what extent do you agree for the following reason? To vicariously experience other's life	-.009	.043	-.016	-.222	.825

<sup>a</sup>.Dependent Variable: Selfesteem

**Table 3.2**

*Instagram story perception of ephemerality and body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	2.576	.648		3.977	<.001
Perceived ephemerality of Instagram story	.271	.090	.119	3.013	.003
Privacy perception of story	-.151	.084	-.117	-1.791	.075
White	-.231	.230	-.067	-1.006	.316
Female	.991	.290	.240	3.423	<.001
How often do you upload your Instagram story?	.019	.062	.021	.299	.765
To what extent do you agree for the following reason? To vicariously experience other's life	.213	.066	.217	3.228	.001

<sup>a</sup>Dependent Variable: BodyImage

**Table 3.3**

*Instagram story edits and body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	3.343	.333		10.024	<.001
White	-.326	.224	-.094	-1.454	.148
Female	.921	.287	.223	3.210	.002
How often do you upload your Instagram story?	.017	.060	.019	.276	.783
Please indicate the level of importance of the following items when you edit your photos for Instagram "story"- Slim Body	.354	.128	.290	2.771	.006
Please indicate the level of importance of the following items when you edit your photos for Instagram "story"- Flawless Skin	.197	.143	.168	1.377	.170

<sup>a</sup>Dependent Variable: Body Image

**Table 3.4**

*Instagram story feature usage and body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.551	.492		7.211	<.001
White	-.385	.234	-.111	-1.646	.101
Female	.936	.315	.227	2.975	.003
How often do you upload your Instagram story?	-.028	.068	-.032	-.419	.676
How likely do you use the following featuring when posting something through Instagram “story”? -Instant Information (location, time, temperature)	.069	.060	.089	1.149	.252
How likely do you use the following featuring when posting something through Instagram “story”? -Filters	.179	.065	.236	2.757	.006

<sup>a</sup>Dependent Variable: Body Image

#### **Perception of permanency influence on self-esteem & body image concerns (Hypothesis 4)**

By testing regression between the perception of permanency and individual’s self-esteem and body image concerns, the results show that there is no significance between perceptions of permanency of Instagram posts and self-esteem (see Table 4.1) and body image concerns (see Table 4.2). Therefore, Hypothesis 4 was not supported.

By examining individuals’ Instagram usage patterns by regression analysis, Instagram post users who focus on matching Instagram their feed ( $b=0.166$ ,  $p<0.05$ ), edit their photos for flawless skin ( $b=0.311$ ,  $p<0.01$ ) (see Table 4.5), use filters ( $b=0.216$ ,  $p<0.01$ ) (see Table 4.3) and take longer to post an Instagram post (see Table 4.4) are more likely to have body image concerns. ( $b=.186$ ,  $p<0.01$ )

**Table 4.1**

*Instagram post perception of permanency and self-esteem*  
*Coefficients<sup>a</sup>*

Model	Unstandardized		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	2.755	.489		5.630	<.001
Perceived permanency of Instagram post	.133	.070	.130	1.901	.059
Privacy perception of Post	.225	.058	.278	3.851	<.001
White	.085	.149	.040	.571	.569
Female	.144	.181	.057	.796	.427
How often do you upload your Instagram post?	.088	.062	.108	1.433	.153
To what extent do you agree for the following reason? To vicariously experience other's life	-.011	.043	-.018	-.257	.797

<sup>a</sup>Dependent Variable: Selfesteem

**Table 4.2**

*Instagram post perception of permanency and body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	3.990	.777		5.133	<.001
Perceived permanency of Instagram post	-.004	.111	-.003	-.040	.968
Privacy perception of Post	-.191	.093	-.145	-2.063	.040
White	-.324	.237	-.093	-1.369	.173
Female	1.051	.288	.255	3.653	<.001
How often do you upload your Instagram post?	.099	.098	.074	1.013	.313
To what extent do you agree for the following reason? To vicariously experience other's life	.199	.068	.203	2.938	.004

<sup>a</sup>Dependent Variable: BodyImage

**Table 4.3**

*Instagram post feature usage and body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.681	.558		8.385	<.001
White	-.412	.239	-.119	-1.723	.086
Female	1.129	.294	.273	3.842	<.001
How often do you upload your Instagram post?	.056	.096	.042	.585	.559
How likely do you use the following featuring when posting something through Instagram “post”? -Post Images/Photos	-.199	.081	-.169	-2.463	.015
How likely do you use the following featuring when posting something through Instagram “post”? -Instant Information (location, time, temperature)	.054	.054	.071	.997	.320
How likely do you use the following featuring when posting something through Instagram “post”? -Filters	.162	.056	.216	2.919	.004

<sup>a</sup>Dependent Variable: Body Image

**Table 4.4**

*Instagram post usage and body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.453	.391		8.823	<.001
White	-.394	.239	-.114	-1.652	.100
Female	1.123	.293	.272	3.831	<.001
How often do you upload your Instagram post?	.078	.093	.058	.838	.403
How long does it take to create and upload an Instagram “post” (not story)	.200	.093	.186	2.731	.007

<sup>a</sup>Dependent Variable: Body Image

**Table 4.5**

*Instagram post edits and body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.714	.343		7.912	<.001
White	-.254	.219	-.073	-1.159	.248
Female	.693	.268	.168	2.587	.010
How often do you upload your Instagram post?	.030	.087	.022	.348	.728
Please indicate the level of importance of the following items when you edit your photos for Instagram "post"-Slim Body	.188	.123	.154	1.529	.128
Please indicate the level of importance of the following items when you edit your photos for Instagram "post"-Flawless Skin	.388	.143	.311	2.713	.007
Please indicate the level of importance of the following items when you edit your photos for Instagram "post"-Matching Instagram filter	.202	.087	.166	2.327	.021
How likely do you use the following featuring when posting something through Instagram "post"? -Hide Complexion	-.097	.114	-.070	-.850	.397

<sup>a</sup>Dependent Variable: Body Image

### **The effect of social comparison on self-esteem and body image concerns (Hypothesis 5)**

In another regression analysis of social comparison on participants' self-esteem and body image concerns, the results show that Instagram users who usually socially compare are likely to have lower self-esteem. ( $b=-0.384$ ,  $p<0.001$ ) (see Table 5.1) Those who update their Instagram post often ( $b=0.166$ ,  $p<0.05$ ) and those who perceive Instagram post to be permanent ( $b=0.153$ ,  $p<0.05$ ) are more likely to have higher self-esteem. Permanency perception does



contribute to enhancing self-esteem but only the part of self-esteem that is not affected by social comparison.

Instagram users who usually socially compare are likely to have higher body image concerns. ( $b=0.47$ ,  $p<0.001$ ) (see Table 5.2) Female participants ( $b=0.16$ ,  $p<0.05$ ) and users who perceive Instagram stories to be ephemeral. ( $b=0.133$ ,  $p<0.05$ ) are more likely to have body image concerns. The regression analysis shows that participants who socially compare while using Instagram are likely to have lower self-esteem and have higher body image concerns. Thus, Hypothesis 5 was supported.

**Table 5.1**

*The effect of social comparison on self-esteem*  
*Coefficients<sup>a</sup>*

		Unstandardized	Coefficients	Standardized	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	4.663	.489		9.536	<.001
	Perceived permanency of Instagram post	.156	.070	.153	2.222	.027
	Perceived ephemerality of Instagram story	-.024	.058	-.028	-.408	.684
	White	.141	.146	.066	.964	.336
	Female	.234	.184	.092	1.277	.203
	How often do you upload your Instagram post?	.136	.062	.166	2.174	.031
	How often do you upload your Instagram story?	.014	.042	.025	.328	.743
	To what extent do you agree for the following reason? To vicariously experience other's life	.023	.043	.038	.534	.594
	Social Comparison	-.353	.066	-.384	-5.379	<.001

<sup>a</sup>Dependent Variable: Selfesteem

**Table 5.2**

*The effect of social comparison on body image concerns*  
*Coefficients<sup>a</sup>*

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.718	.702		1.022	.308
Perceived permanency of Instagram post	-.104	.101	-.062	-1.031	.304
Perceived ephemerality of Instagram story	.181	.083	.133	2.168	.031
White	-.321	.210	-.093	-1.528	.128
Female	.662	.263	.160	2.514	.013
How often do you upload your Instagram post?	.208	.090	.081	1.207	.229
How often do you upload your Instagram story?	-.029	.060	-.033	-.488	.626
To what extent do you agree for the following reason? To vicariously experience other's life	.090	.062	.092	1.463	.145
Social Comparison	.703	.094	.470	7.463	<.001

<sup>a</sup>Dependent Variable: Body Image

The result of the present study provides insights into whether the perception of ephemerality and permanency impact Instagram users' social comparison, self-esteem, and body image concerns.

In contrast with the hypothesis that perceived ephemerality of Instagram story cause less social comparison and body image concerns, the results were contrary. Users who perceived Instagram stories to be ephemeral are more likely to socially compare and have higher body image concerns. However, there was no significant relationship, when testing the significance between the perceived permanency of Instagram posts and social comparison and body image concerns. Self-esteem was the variable that was not influenced by both perceived ephemerality of Instagram story and perceived permanency of Instagram posts.

Regardless of ephemerality and permanency perceptions, Instagram users who take longer to create and post their content are more likely to socially compare. Also, Instagram

users who edit their content to have slim bodies, flawless skin, and add filters to their content are more likely to have body image concerns. Lastly, the result of the current study shows that Instagram usage patterns do not influence self-esteem. However, in general, the present study proved that Instagram users who socially compare are likely to have lower self-esteem.

## Chapter 5: Discussion

Due to the increase of social media usage, its impact on individuals was the focus of previous scholarly research. (Longobardi, 2018; Jan, Soomro & Ahmad, 2017) Previous studies demonstrated that social media usage caused people to perform social comparison (Tiggemann, Hayden, Brown, & Veldhuis, 2018), by which self-esteem increased or decreased (Jan, Soomro & Ahmad, 2017), and also create body image concerns due to the increase in idealized images on social media (Tiggemann & Anderberg, 2020). Most research studies focus on a particular media, such as Instagram, Facebook, Tik Tok, and Snapchat, however, there are limitations on figuring out if a specific social media feature has a direct influence on people. The present study was designed to examine the effects of social media users' perceptions of ephemerality and permanency of Instagram stories and posts on social comparison, self-esteem, and body image concerns.

As mentioned, research agendas to find whether there is a relationship between social media usage and an individual's self-esteem, social comparison, and body image concerns have been popular. However, there is a lack of research on finding the difference between people's reactions to different social media messages, such as ephemeral and permanent content. The present study investigated how people react differently to two types of social media content. This study hypothesized that people would less socially compare, have higher self-esteem, and have fewer body image concerns as they perceived the Instagram stories as more ephemeral. The results show a significant relationship between the perceived ephemerality of Instagram stories and social comparison and body image concerns. However, there was no significant relationship between self-esteem and ephemerality perceptions. Contrary to the hypotheses, users who perceive Instagram stories to be ephemeral were *more likely* to compare and have *higher* body image concerns. First, the results showed that users who perceive the Instagram story as ephemeral are more likely to socially compare. It could

be because Instagram story is used to share the user's everyday moments and highlight their daily activities. The ephemerality feature allows users to share a broader range of content as it is an easy and quick way to share their moments (Morlok, Constantious, & Hess, 2018). Viewing others' lifestyles can evoke jealousy and envy towards others' lifestyles, which often lead to upward comparison (Jan, Soomro, & Ahmad, 2017). The result suggests that ephemerality itself does not reduce social comparison as the current study expected, when the ephemeral features like Instagram stories are used to boost fancy lifestyles, they can actually encourage even greater social comparison since it adds to the presentation and promotion of the self.

Another interesting finding is the effect of privacy perception as a control variable while testing the results. The analysis shows that users concerned about their privacy are less likely to compare themselves with others. Previous research shows that users who are concerned about their privacy are likely to set their account to be private and make the content only visible to their friends (Hu, Manikonda, Kambhampati, 2014). This suggests that users who have a private account will less socially compare as they can choose who can view the content and what content they want to see. Previous research shows that individuals express how ephemerality counteracts their privacy concerns as users can control their content viewers (Morlok, Constantious, & Hess, 2018). To interpret this, people who are less concerned about privacy are likely to have an account that is more public and allows users to view diverse content. Exposure to different people and content could potentially lead people to compare themselves with others.

Equivalent to social comparison, users who perceive Instagram stories as ephemeral are likely to have higher body image concerns. This was contrary to the hypothesis that predicted users who perceived Instagram stories to be ephemeral would have fewer body image concerns. The present study hypothesized this as Snapchat users, a social media that

has a similar ephemeral nature, express fewer concerns as ephemeral content allows users to send more effortless photos and not to focus on getting pictures of their best selves (Jan, Soomro & Ahmad, 2017). However, previous research also points out that social media that focuses on visuals could lead users to express more dissatisfaction with their body images (Longobardi, 2018). As Instagram stories are also ephemeral social media that uses visual content, this visual emphasis of the medium may have encouraged greater body dissatisfaction, especially when users think that they have to present their best selves in the transient, ephemeral context. During the regression analysis, the results also showed some features that Instagram users use also influence their body image concerns. Instagram users who use filters and edit themselves for a slimmer body tend to have greater body image concerns. This finding supports the possibility that people are keenly aware of their presentation on Instagram stories even if the content is considered to be ephemeral.

In opposition to the significant findings of perceived ephemerality of Instagram stories, there was no significant relationship between perceived permanency of Instagram posts, social comparison, and body image concerns. Previous research studies that examined the relationships between Instagram usage and psychological constructs has mainly focused on Instagram posts as it is the key feature of Instagram. These studies have shown that individuals compare themselves by comparing the number of likes to their peers (Tiggemann, Hayden, Brown, & Veldhuis, 2018), that envying others' lifestyles leads users to have lower self-esteem (Jan, Soomro & Ahmad, 2017), and that comparing their appearance with others evokes increased body image concerns (Longobardi, 2018). The current study's finding suggests that even though Instagram is used to upload photos or videos and share them with followers or a select group of friends. (Lee, Lee, & Moon, 2015), and the heavy Instagram users tend to perform more social comparison (Tiggemann, Hayden, Brown, & Veldhuis, 2018), how permanent they perceive the uploaded content will be does not influence social comparison,

body image concerns, or self-esteem. This may be because most users believe that the Instagram content can be deleted anytime if they desire, and the small variance in the perception of permanency does not influence other psychological variables.

Besides examining users' perception of ephemerality and permanency of Instagram, the study also hypothesized that users who socially compare are likely to have lower self-esteem and higher body image concerns. The results supported the hypothesis as individuals who socially compare while using Instagram, both story and post, had less self-esteem and more body image concerns. Previous research mentioned how people make upward or downward comparisons while using social media. People envy others, feeling less privileged and inferior to them, which can lead to negative feelings about themselves (Jan, Soomro & Ahmad, 2017). Social comparison also impacts concerns about their body images. Social media networks allow people to edit and manipulate their photos (Hu, Manikonda, Kambhampati, 2014), making it easy for people to upload photos of their best presentation. Exposure to the visual content of idealized images gives opportunities to compare their appearance, which encourages people to compare themselves with others and leads to negative perceptions of their bodies. The current result aligns with previous research that social comparison does negatively impact self-esteem and body image concerns.

Another interesting finding from this present study is that self-esteem decreased or increased only under the condition that users socially compare. Self-esteem does not change if users do not socially compare when using Instagram for both posts and stories. Previous research that studies the relationship between social media usage and self-esteem supports this result because social media users usually make an upward social comparison while browsing, leading individuals to have lower state self-esteem and life satisfaction (Midgley, Thai, Lockwood, Kovacehff, & Page-Gould, 2020). High use of social media will also lead users to gain high social comparison orientation (Ozimek & Bierhoff, 2020), which would

also negatively impact self-esteem. Moreover, the results show that if an Instagram user does not socially compare themselves with others, the category of content, features, how they edit content, and the amount of time when creating content does not influence self-esteem. The perception of ephemerality and permanency also did not influence self-esteem. As self-esteem is evaluating themselves positively or negatively (Coopersmith, 1967), users would focus more on their looks, profile, picture, or content (Gonzales, Hancock, 2010) and not focus on how long their content is on their social media page. Overall, this study shows that social comparison explains the most variance in self-esteem and is the critical predictor of self-esteem in social media usage. Future studies can further examine other psychological constructs that can significantly predict self-esteem apart from social comparison. Experimenting with whether a participant's self-esteem is influenced positively or negatively by deleting the number of likes or deleting the comments would be interesting future research. As most social networks are based on likes and comments, this is the most common feature that leads people to compare to others. (Tiggemann, Hayden, Brown, & Veldhuis, 2018)

Apart from the hypotheses, the present study also found results regarding social media usage patterns and whether it influences social comparison, self-esteem, and body image concerns. The types of features, edits, content, and time spent to create content were examined. First, the results show that the longer it takes to create and upload an Instagram post, users are more likely to perform social comparison and have body image concerns. Instagram story users who take a long time to create and upload also performed greater social comparison. As Instagram, both posts and stories, allows users to edit their photos (Brown & Tiggemann, 2016), users spend more time creating and posting to create their ideal look. Regular exposure to idealized body images on Instagram will lead users to compare their



appearance with others which can influence users to have dissatisfaction with their body (Longobardi, 2018).

Next, the current study also found that users who edit their content to create a slimmer-looking body, use filters, have flawless skin and match Instagram filters are more likely to have higher body image concerns. Individuals who are concerned about their body image are likely to focus on editing their appearance to create their ideal look and worry about how they are presented on social media. Prior research suggests that there are two types of motivation for self-presentation, one is to please the audience and the other is to match their ideal selves (Mullen & Goethals, 1987). Editing their content to create a more idealized look by editing their content shows how individuals' value self-presentation and lead to increased body image concerns.

In sum, even though the current study did not find any significant relationships among perceived permanency of Instagram posts, social comparison, self-esteem, and body image concerns, users who perceived Instagram stories as more ephemeral were found to perform greater social comparison and have greater body image concern. Control variables such as gender and the purpose of Instagram usage were also significant predictors of social comparison and body image concerns. Females and those who use Instagram to vicariously experience other's lives were more likely to do heavier social comparisons and have greater body image concerns. This finding aligns with previous research studies that exposure to images on social media have a detrimental effect on female's body image concerns. "Vicariously experience other's lives" was selected as a main motivation that would affect the results since it is most likely to address the reason why users compare themselves with others and peek other's lives presented on the Instagram.

## **Limitations**

While the current study provides novel information about how different perceptions of Instagram messages influence individuals, the study does come with limitations. As the survey was distributed online, and respondents answered the survey in a less controlled setting, there is a possibility that the participants are less engaged with the survey. This may have influenced the result of the research. Also, the focus of the present study was to examine whether the perception of ephemerality and permanency of Instagram influences social comparison, self-esteem, and body image concerns. However, the measurement items for ephemerality and permanency perceptions consisted with only two or three statements, due to the lack of previous research in this area. For instance, to examine whether a participant perceived an Instagram story as ephemeral, “Content I am posting in the story disappears in a short period of time” and “It would be hard for others to go back to past content that I posted” were used. These statements could have measured ephemerality more precisely with a more specific definition of “a short period of time” as some users may believe ephemeral media to be 10 seconds while others think it is for 24 hours. Also, to examine whether users perceived Instagram posts to be permanent, “It is easier for others to go back and see/check my past posts”, “Content I am posting in an Instagram post will stay on the platform for a long time”, and “It allows me to archive the posts that I perceive as valuable.” were used. As mentioned in the discussion, most users may believe all social media are not permanent as content can be deleted by the users when they desire to do so. For future research, better operational definitions of ephemerality and permanency should be employed.

There is a lack of research on finding the difference between Instagram messages, Instagram posts and stories. To create the hypotheses on the perceived ephemerality of Instagram story, the current study relied on prior literature on Snapchat was used as an example as it has a similar ephemeral nature. Even though Snapchat is an ephemeral app,

Snapchat only allows its users to share content with people who they have added as friends (Choi & Sung, 2018). However, Instagram stories can be viewed by the same people as Instagram posts. Users may not upload the same content in Snapchat and Instagram stories. For future research, more specific information on Instagram story usage habits should be studied to form the hypotheses.

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